

## CLAIMS

What is claimed is:

1. A method for characterizing exposure levels in a platesetter, the method comprising:
  - 5 exposing regions of a plate at different exposure levels outside of a printing area by modulating a power of an exposure beam; and
  - analyzing the plate after development to determine a desired exposure level for plates on the platesetter by reference to the regions receiving the different exposure levels.
- 10 2. A method as claimed in claim 1, wherein the step of exposing regions of the plate comprises exposing the plate at different exposure levels in a direction of imaging head movement.
3. A method as claimed in claim 1, wherein the step of exposing regions of the plate comprises exposing the plate along a gripper edge.
- 15 4. A method as claimed in claim 1, wherein the step of exposing regions of the plate comprises generating an exposure map.
5. A method as claimed in claim 1, wherein the step of generating the exposure map comprises generating log changes in exposure levels by controlling a current to a laser generating the exposure beam.
- 20 6. A method as claimed in claim 1, wherein the step of generating the exposure map comprises generating log changes in exposure levels by controlling an attenuator acting on the exposure beam.
7. A method as claimed in claim 1, wherein the step of generating the exposure map comprises generating regions including halftone patterns at different exposure levels.
- 25 8. An exposure characterization system for a platesetter, the system comprising:

an exposure beam generator for generating a modulated exposure beam for exposing  
a plate;

a controller for controlling the exposure beam generator to expose regions of the  
plate at different exposure levels by controlling a power of the exposure beam  
5 in a region outside of a printing area.

9. A system as claimed in claim 8, wherein the exposure beam generator comprises a  
modulated laser diode.

10. A system as claimed in claim 8, wherein the exposure beam generator comprises a  
laser source and an attenuator for controlling a power of the exposure beam delivered  
10 to the plate.

11. A system as claimed in claim 8, wherein the controller controls the exposure beam  
generator to expose the plate at different exposure levels in an area extending in a  
direction of imaging head movement.

12. A system as claimed in claim 8, wherein the controller controls the exposure beam  
generator to expose the plate at different exposure levels along a gripper edge.  
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13. A system as claimed in claim 8, further comprising an exposure map storage for  
storing exposure levels of an exposure map.

14. A system as claimed in claim 13, wherein the exposure map includes log changes  
in exposure levels.

15. A system as claimed in claim 8, wherein the exposure map includes regions  
including halftone patterns at different exposure levels.  
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16. A method for controlling plate exposure in a plate production line, the method  
comprising:

exposing regions of plates at different exposure levels in areas outside of printing  
25 areas of the plates; and

analyzing the plates after development to determine desired exposure levels for the plates on the platesetter by reference to the regions receiving the different exposure levels; and  
feeding back changes in an exposure level for the printing areas of plates in the platesetter.

17. A method as claimed in claim 16, wherein the step of exposing regions of the plates comprises exposing the plates along a gripper edge.

18. A method as claimed in claim 16, wherein the step of exposing regions of the plates comprises generating exposure maps on the plates.

20. A method as claimed in claim 16, wherein the step of generating the exposure maps comprises generating log changes in exposure levels by controlling a current to a laser generating an exposure beam.

21. A method as claimed in claim 16, wherein the step of generating the exposure map comprises generating log changes in exposure levels by controlling an attenuator acting on an exposure beam.

22. A method as claimed in claim 16, wherein the step of generating the exposure maps comprises generating regions including halftone patterns at different exposure levels.

23. A plate exposure level control system, comprising:

an exposure beam generator for generating a modulated exposure beam for exposing plates;

a controller for controlling the exposure beam generator to expose regions of the plates at different exposure levels by controlling a power of the exposure beam;

a post development analyzer for analyzing the plates after development to determine a desired exposure level for plates on the platesetter by reference to the regions

receiving the different exposure levels and feeding back changes in an exposure level for the printing areas of plates in the platesetter.

24. A system as claimed in claim 23, wherein the exposure beam generator comprises a modulated laser diode.

5 25. A system as claimed in claim 23, wherein the exposure beam generator comprises a laser source and an attenuator for controlling a power of the exposure beam delivered to the plate.

10 26. A system as claimed in claim 23, wherein the controller controls the exposure beam generator to expose the plate at different exposure levels in an area outside of a printing area.

27. A system as claimed in claim 23, wherein the controller controls the exposure beam generator to expose the plates at different exposure levels along a gripper edge.

28. A system as claimed in claim 23, further comprising an exposure map storage for storing exposure levels of an exposure map.

15 29. A system as claimed in claim 28, wherein the exposure map includes generating log changes in exposure levels.

30. A system as claimed in claim 28, wherein the exposure map includes regions including halftone patterns at different exposure levels.

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